

U.S. Department of Energy
Quarterly Teleconference on Implementing
Environmentally Preferable Purchasing Requirements
April 27, 2004 11 a.m. - 12:30 p.m. (EDT)

TOPICS

- ☐ Walkthrough of DOE's Buy Bio Program and a sample biobased purchasing website
- ☐ Examples of DOE sites piloting biobased products

PARTICIPANTS:

U.S. Department Of Energy Headquarters: Doug Kaempf, Mark Decot, Jane Powers, Richard Langston, Don Lentzen, Laura Neal (BCS, Incorporated)
Yucca Mountain Characterization Project: Lee Bishop

Office of the Federal Environmental Executive: Dana Arnold

Albuquerque Operations Office: Teresa Loschke
Grand Junction Projects Office: Cheri Bahrke
Kansas City Plant: Carolyn Lucas, Randy
Los Alamos National Laboratory: Jim Stanton
Pantex Plant: Marc McCusker
Sandia National Lab: Laurie Farren
Waste Isolation Pilot Plant: Koreen Guillermo

Atlanta Regional Office: Kim Penfold

Boston Regional Office: Eric Beaton

Chicago Operations Office: Tony Bindokas
Brookhaven National Laboratory: Peter Pohlot, Caroline Polanish
Fermi National Accelerator Laboratory: Bob Johnson
Princeton Plasma Physics Laboratory: Tom McGeachen

Chicago Regional Office: Mike Bednarz

Fossil Energy/Albany Research Center:
National Energy Technology Laboratory: Bruce Webster, Fran Wright
Strategic Petroleum Reserves: Kathy Batiste, Joyce Francois, Terry Heaton

Golden Field Office:
National Renewable Energy Laboratory: Don Carlile

Idaho Operations Office: Darrell Brown

Naval Reactor Sites:
Pittsburgh: Greg Sawl

Oakland Operations Office:

Lawrence Berkeley National Laboratory: John Spiro
Stanford Linear Accelerator Center: Rich Cellamare

Oak Ridge Operations Office:

Oak Ridge Associated University: Ernest Whitaker
Oak Ridge National Laboratory: Richard Martin
Oak Ridge Y-12 Facility: Anne Ostergaard
Thomas Jefferson National Accelerator Facility: Dennis Dobbins

Ohio Field Office

West Valley Demonstration Project: Gerry

Philadelphia Regional Office: John Cervo

Richland Operations Office: Hector Rodriguez

Hanford Site: Joe Coenenberg (FH), Ed Foss (FH), Michael Hughes (BHI), Tom Lazarski (BHI), Cecily Lehmann (CH2MHILL)
Pacific Northwest National Laboratory: Sandra Cannon, Bryan Colley, Janice Haney, Jeff Lettau, Margie Myers, Kevin Pfeifer, Linda Mesaros (Mesaros Inc.),

Rocky Flats Operations Office: Doug Schlagerl

Power Administrations:

Western: Frank Armstrong

Manufacturers Associations:

Biobased Manufacturers Association: Kim Kristoff, Dan Manternach, Harry Albert
United Soybean Board: Sueanne Pfifferling, Gale Johnson

The U.S. Department of Energy would especially like to thank Dan Manternach with the Biobased Manufacturers Association for arranging our access to the BMA Supercenter during the teleconference even though it is not quite open for shopping and to Harry Albert with XS Inc. for developing the BMA Supercenter, walking our teleconference participants through the Supercenter's mall, and web streaming the walk through.

MINUTES

Introduction - Don Lentzen, DOE-HQ EO 13101 Manager

This teleconference will introduce the Department of Energy's (DOE) voluntary Buy Bio Program. All are encouraged to use the biobased products currently available. Please share any information on biobased products you have used or are currently using.

DOE Buy Bio Initiative- Mark Decot, DOE-HQ Buy Bio Program Lead

- The purpose of the Initiative is to procure biobased products to help achieve energy security.
- The goal is to inform participants of the requirements of the Farm Bill, to answer questions about biobased products, and to encourage participation in the Initiative with pilot projects.

DOE Buy Bio Program- Doug Kaempf, Manager, DOE Office of the Biomass Program (OBP)

- Biobased products are important to the OBP goals of energy security because they reduce our dependence on foreign oil and help create a sustainable domestic bioindustry.
- OBP makes research and development funds available to reduce the cost of feedstocks for the production of power, products, and fuels from renewable, domestic energy sources.
- DOE is a large market for biobased products and is proud to be part of establishing a new biobased industry and contributing to national security.

National Bioenergy Center (NBC) Labs- Don Stevens, Pacific Northwest National Laboratory

- The NBC Labs are important to biobased products because they conduct research and development on all aspects of biobased products, including fundamental research to grow the products industry. The Labs recognize the importance of marketing to the biobased effort.
- Question, Mark Decot: Is there a biobased products point of contact for the NBC Labs?
- Don Stevens: Each laboratory will have its own point of contact. The NBC Biobased Products Initiative contacts are:
 - NREL Susan Huffnagle, Tel. 303-384-7547, susan_huffnagle@nrel.gov
 - ANL Barb Markwenas, Tel. 630-252-8306, bmarkwenas@anl.gov
 - INL Charlotte Wasia, Tel. 208 -526-4498; pen@inel.gov
 - NETL John Augustine, Tel. 412-386-4524; john.augustine@netl.doe.gov
 - ORNL Susan Michaud, Tel. 865-576-1562; michaudsr@ornl.gov
 - PNNL Sandra Cannon, Tel. 509-529-1535; sandra.cannon@pnl.gov

Procurement- Richard Langston, Office of Procurement and Assistance Management

- All are encouraged to be early adopters of the Buy Bio Program and learn to use it before it becomes mandatory when USDA completes their ruling.
- The Buy Bio program will be operated similar to the Affirmative Procurement (Recycled Products) Program currently in operation.
- We are hoping the EH reporting system will be revised to accommodate reporting our purchases of biobased products. Until those changes are made and during the pilot period in FY2004, everyone should set up their own ad hoc system for reporting so we can track the purchases during the pilot period.

Pilot Project Examples: Biobased General Purpose Cleaner, Detergent, Diesel- Sandra Cannon, Pacific Northwest National Laboratory, link to

<http://www.pnl.gov/esp/greenguide/custodialproducts/>

- In 2000, the Pacific Northwest National Laboratory (PNNL) created environmentally preferable specifications for custodial products. From 33 custodial products, we reduced the number to 7 by switching to an all-purpose biobased cleaner that can be diluted to different strengths for cleaning most everything from mirrors to carpets. This switch reduced waste handling and disposal costs and increased worker and environmental safety. The purchasing costs are now approximately \$1500 less per container times the number of containers/year.

- This year we surveyed all products to identify which might be transitioned to biobased counterparts. Examples being considered are biobased detergent for our parts washers and biodiesel for our tractors and lawn mower. These substitutions meet equipment specifications, safety and health regulations, and air quality regulations. An initial setback to the use of biodiesel was that it is not readily available in our area, and the transportation costs were too expensive. However, our local diesel dealer is interested in carrying biodiesel.
- Jeff Lettau, PNNL Grounds Manager, explained one of the tractors we want to transition to biodiesel is still under warranty and the dealer from whom we purchased the tractor claims using biodiesel without a retrofit would void the warranty. However, after looking further into the facts, this appears to not be the case.
- Question, Tom McGeachen: Can B20 be used in electric generators? Does its use void warranties and meet mill standards?
- Sueanne Pfifferling: The USDA Beltsville facility uses biodiesel in its generators.
- Don Stevens: Biodiesel is used in Europe for power and in diesel engines.
- Mark Decot: DOE has a congressionally directed project in Tennessee to use biodiesel to run an electric power plant.
- Action, Jim Stanton: I just finished a B20 project and will send details to the group.
<http://www.eh.doe.gov/p2/ap/epp-diesel-Mt-Rainier-Case-Study.ppt>
- Action, Kim Penfold: I will send a case study on small diesel generators out to the group.

Pilot Project Example: Biobased Hydraulic Fluid in Elevators- Tom McGeachen, Princeton Plasma Physics National Laboratory, presentation to accompany
<http://www.eh.doe.gov/p2/ap/Buy-Bio-Pilot-PPPL-Hydraulic-Fluid.ppt>

- The Princeton Plasma Physics National Laboratory (PPPL) is not yet a true national lab but will be soon.
- A very old building elevator had a hydraulic fluid leak. In the course of writing the Request for Proposal to purchase a new elevator, it was suggested we specify the elevator have biobased hydraulic fluid. Elevator manufacturers and technicians verified that biobased fluid would work properly in the elevator, and installation of the new elevator with biobased hydraulic fluid is set to begin immediately.
- PPPL also plans to use biobased hydraulic fluid in our backhoes and a vehicle barrier system.

Pilot Project Example: Biobased Hydraulic Fluid in Garbage Trucks and Lift Bays- Peter Pohlot, Brookhaven National Laboratory, link to
<http://www.bnl.gov/bnlweb/pubaf/pr/2002/bnlpr071702.htm>

- Projects in Long Island are highly regulated due to the aquifer system that provides drinking water. Spills must therefore be responded to immediately.

- In 1998, a fluid leak occurred in the bay with a clean up cost of approximately \$15,000. At that time, hydraulic fluid was replaced with a vegetable-based fluid. One problem that occurred due to the use of vegetable-based fluid is that it degraded the rubber on the lifts. This was solved by retrofitting the lifts.
- In 2002 there were four garbage truck spills. This problem was solved by adding abrasion collars to the truck lifts and replacing the hydraulic fluid with vegetable-based fluid.
- The previous cost of garbage truck spills was between \$2500-\$3500 per spill. Spills now cost only \$1000 per spill to clean up, and small spills do not have to be dealt with due to the use of vegetable-based fluids.
- Downfalls to this include the initial cost of the switch to vegetable-based hydraulic fluid was approximately three and one half times the cost of petroleum-based hydraulic fluid and that using vegetable-based hydraulic fluid may void manufacturer warranties.
- Question, Dana Arnold: What are the regulations regarding spills of biobased fluids?
- Tom McGeachon: Soils on which biobased fluids have been spilt can be oxidized.
- Question, Dana Arnold: What is the EPA's stance on this?
- Kim Kristoff: Biobased fluid spills should be treated as any other type of spill.
- Peter Pohlot: Small, contained lawn mower spills can be left without treatment. Larger, more concentrated spills are to be treated as any other spill. EPA regulations are not as stringent on end point sampling.
- Action, Dana Arnold: EPA needs to formally address the issue of biobased spills. Could the USDA please submit an official request for a ruling on this?
- Peter Pohlot: It should be noted that some biobased fluids contain additives that are just as toxic as regular fluids.

Federal Buy Bio Update- Dana Arnold, Office of the Federal Environmental Executive,
<http://www.ofee.gov/gp/bioprod.html>

- USDA submitted a notice of the Procurement Plan in December to the Federal Register. The framework for the plan should be finalized by the end of this year. The designation of specific products will follow.
- The Office of the Federal Environmental Executive already encourages the use of biobased products even before the list is finalized. You should, however, be warned that the specifics could differ from what you are using now when the list does come out.
- Question (on previous topic), Bruce Webster: Is it necessary to flush a hydraulic system before switching to a biobased product?
- Kim Kristoff: There are only four producers who make 100% biobased products. The other thirty producers make biobased products that often contain petroleum-based additives.

There is no long-term data to show whether or not vegetable-based fluids are more detrimental to hydraulic systems than petrobased fluids.

Let's Go Shopping at a Sample Biobased Purchasing Website- Kim Kristoff, Dan Manternach (Biobased Manufacturers Association), Harry Albert (XS Inc.), link to <https://mcdemo1.webex.com/meet/halbert>

- The Biobased Manufacturers Association (BMA) exists to provide commercial biobased products at one supercenter rather than through hundreds of smaller sites.
- BMA is working to build a prototype website where Federal Agencies can purchase biobased products. The website is www.biobased.com, and Federal Agencies should click the "Supercenter" link. The website is modeled after a shopping mall, where multiple, separate vendors are gathered to allow the customer to shop for products offered by different vendors in one place. The site is only for the use of Federal Agencies and is not available to the public. Vendors therefore provide better prices.
- Question, unknown: Is the site available to federal contractors?
- Unknown: Yes.
- A demonstration of the website was given. Participants were instructed on how to search for products by company, products, or keywords and how to purchase them. Features of the website, such as product descriptions and the favorites function, were demonstrated as well.
- Margie Myers purchased biobased detergent for Kevin Pfeifer to test in the parts washers at the Pacific Northwest National Laboratory.

Reporting- Mark Decot

- Thank you all for participating. Feedback on the BMA purchasing website would be appreciated. Please contact Sandra Cannon (Tel. 509-529-1535) with any questions or help in initiating pilot projects to purchase biobased products.
- Reporting for Buy Bio Program will work the same as that for recycled products. At the end of the year, a report will be submitted to the Administration.
- Question, Darrell Brown: What is USDA's involvement with the BMA website?
- Harry Albert: This is just an example for a demo site. The goal is to have the site operational within 30 days with four stores. Stores will then be added at the rate of 4-5 stores per week.
- Sandra Cannon: The next teleconference is tentatively scheduled for Thursday, July 22. This will be confirmed at a later date and an agenda will be sent out.

Adjourn

SOURCES OF INFORMATION

DOE's "Environmentally Preferable Products Program" website for access to the reporting site, annual report, teleconference agenda and minutes, and sources of helpful information

U.S. Department of Energy's RCRA 6002/Executive Order 13101 home page

<http://www.eh.doe.gov/p2/ap/default.htm>

Environmentally Preferable Purchasing Executive Orders, Regulations, Guidelines

Office of the Federal Environmental Executive

www.ofee.gov

GENERAL PRODUCT INFORMATION

Environmentally Preferable Products

U.S. Environmental Protection Agency

<http://www.epa.gov/oppt/epp/database.htm>

Alternative Fuels and Vehicles

U.S. Department of Energy

<http://www.eere.energy.gov/vehiclesandfuels/epact/federal/>

Biobased Products

U.S. Department of Agriculture

<http://usda-biobasedproducts.net/public/>

Energy/Water Efficient Products

Federal Energy Management Program

<http://www.eren.doe.gov/femp/procurement/>

Recycled Products and Suppliers

U.S. Environmental Protection Agency Comprehensive Procurement Guidelines

<http://www.epa.gov/epaoswer/non-hw/procure/index.htm>

Materials Exchange Products

(especially chemicals, equipment, and hazardous materials) at other DOE facilities

Log on with user name (erhquser) and password (erhqdoe)

DOE Complex Wide Materials Exchange

<http://wastenot.er.doe.gov/DOEmatex/index.html>

SPECIFIC PRODUCT CATEGORIES

Carpet

Contract Language and Standards/Guidelines

U.S. Environmental Protection Agency

<http://yosemite1.epa.gov/oppt/eppstand2.nsf/Pages/DisplayAisle.html?Open&Hardware%20Store&Carpet>

Recycled Content Specifications and Suppliers

U.S. Environmental Protection Agency

<http://www.epa.gov/epaoswer/non-hw/procure/products/carpet.htm>

Suppliers

Green Seal "Choose Green Report: Carpet"

http://www.greenseal.org/cgrs/Carpet_CGR.pdf

Cement/Concrete

Recycled Content Specifications and Suppliers

U.S. Environmental Protection Agency

<http://www.epa.gov/epaoswer/non-hw/procure/products/cement.htm>

Cleaning Products

Contract Language and Standards/Guidelines

U.S. Environmental Protection Agency

<http://yosemite1.epa.gov/oppt/eppstand2.nsf/Pages/DisplayAisle.html?Open&Hardware%20Store&Cleaning%20supplies%20and%20equipment>

Decision Making Wizard for

U.S. Environmental Protection Agency

<http://www.epa.gov/opptintr/epp/cleaners/select/>

Specifications and Process Used at PNNL

Pacific Northwest National Laboratory

<http://www.pnl.gov/esp/greenguide/custodialproducts/>

Suppliers

Green Seal "Choose Green Report: Industrial and Institutional Cleaners"

http://www.greenseal.org/cgrs/CGR_I&I_cleaners.pdf

Construction Materials and Products

Contract Language

U.S. Department of Energy

<http://www.pnl.gov/doesustainabledesign/> , see "Letters of Intent, Construction Contracts"

Paint

Recycled Content Specifications and Suppliers

U.S. Environmental Protection Agency

<http://www.epa.gov/epaoswer/non-hw/procure/products/paint.htm>

Suppliers

Green Seal "Choose Green Report: Architectural Paints"

http://www.greenseal.org/cgrs/CGR_Paints.pdf

Toner Cartridges

Recycled Content Specifications and Suppliers

U.S. Environmental Protection Agency

<http://www.epa.gov/epaoswer/non-hw/procure/products/toner.htm>

Supplier Examples of Quality Remanufactured Cartridges

Pacific Northwest National Laboratory

http://www.pnl.gov/esp/greenguide/ap_toner.html